

REMARKS

In the present Amendment, the specification has been amended to correct typographical errors.

Claims 2-6 have been amended to improve their format and/or to correct typographical errors. These amendments are not to be deemed to narrow the scope of the claims.

Claim 7 has been amended to delete the phrase “preferably between 10 and 20%” and to improve its format.

Claim 8 has been added. Claim 8 is supported by the specification, for example, in original claim 7.

No new matter has been added and entry of the Amendment is respectfully requested. Upon entry of the Amendment, claims 1-8 will be all the claims pending in the application.

I. Response to Objection to Specification

At page 2 of the Office Action, the specification has been objected to for misspellings.

In response, Applicants have in the Amendment amended the specification to correct the typographical errors. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the objection.

II. Response to Rejection Under 35 U.S.C. § 102

At page 2 of the Office Action, claim 1 has been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Thompson et al (U.S. Patent No. 4,726,845).

Applicants respectfully traverse the rejection for at least the following reasons.

The present invention relates to a pseudoplastic water based ink for a ball-point pen comprising at least a colorant, water and an associative type viscosity control system, whereby

the viscosity of the ink is comprised in a range from 20 to 40 mPa.s (or cP), when it is subjected to a shear rate of 1000 s^{-1} , and between 10,000 and 12,000 mPa.s, when the shear rate is 1 s^{-1} .

As noted by the Examiner, Thompson et al discloses general viscosity ranges of 25,000 to 120,000 cP and 6 to 26 cP measured at shear rates of 0.1 s^{-1} and $10,000\text{ s}^{-1}$, respectively (see col. 3, lines 3-5). Applicants respectfully submit that any comparison between viscosities measured with different shear rates is absolutely meaningless.

Thompson et al further discloses, in Tables 1-4, the viscosity data of several ink compositions measured at the shear rates of 1000 s^{-1} and 1 s^{-1} . As it is immediately apparent from these data, no ink composition disclosed by Thompson et al has a viscosity comprised both in the range from 20 to 40 cP, when it is subjected to a shear rate of 1000 s^{-1} , and in the range from 10,000 to 12,000 cP, when it is subjected to a shear rate of 1 s^{-1} , as presently claimed. That is, none of the examples disclosed by Thompson et al falls within the scope of the present invention.

In view of the foregoing reasons, Applicants respectfully submit that the present invention is not anticipated by Thompson et al and that the rejection should be withdrawn.

III. Response to Rejection Under 35 U.S.C. § 103

a. At page 3 of the Office Action, claims 6 and 7 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Thompson et al.

Applicants respectfully submit that the rejection of claim 1, from which claims 6 and 7 depend, has been overcome as set forth above and thus the rejection should be withdrawn.

b. At page 4 of the Office Action, claims 1-5 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Inoue et al (U.S. Patent No. 5,712,328).

Applicants respectfully traverse the rejection for at least the following reasons.

The Examiner stated that Inoue et al. “remains silent to the viscosity.” See page 4 of the Office Action. Applicants respectfully disagree. Inoue et al discloses that the ink composition “has a viscosity of about 2,000 to 8,000 cps” (see col. 2, lines 2-3, and Table 1 at col. 10). This range is outside both the ranges of the present invention.

Further, the only pseudoplastic agents actually used in the compositions of the examples of Inoue et al and cited in the claims thereof are xanthan gum and welan gum. On the other hand, according to the present invention (see the paragraph bridging pages 4 and 5 of the specification), xanthan gum may only be the second component of the viscosity control system comprising, as the first component, an associative thickener selected from the group consisting of HASE, HEUR and HEURASE. Inoue et al is completely silent with respect to the presence of this association of the components and their synergic action. Accordingly, Applicants respectfully traverse the rejection of claims 2-5 over Inoue et al for this reason, independently.

In view of the foregoing reasons, Applicants respectfully submit that the present invention is not disclosed or suggested by Inoue et al and that the rejection should be withdrawn.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No.: 10/814,153

Attorney Docket Q80435

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Fang Liu
Registration No. 51,283

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: January 5, 2005